

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015066**Date Inspected:** 22-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as 8CW and 8CE X8E to edge plate. The weld designations reviewed are as follows:

8CW

1. SEG047H-65~67, 83~85, 92~33, 128~130,
2. SEG047J-40~41, 22~24

8CW

1. SEG048H-46~48, 26~30
2. SEG048J-155~157, 168, 173~174

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8AE

Shield Metal Arc Welding (SMAW) VT repair welding was performed various locations on the FL3 horizontal stiffeners cross beam side of segment. Welder is identified as Mr. Cheng Zhenghua (220066). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair-1 and CWR1414 procedure.

Shield Metal Arc Welding (SMAW) VT repair welding was performed various locations on the FL3 horizontal stiffeners cross beam side of segment. Welder is identified as Mr. Luo Xuanping (067610). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair-1 and CWR1414 procedure.

8CE

Shield Metal Arc Welding (SMAW) VT repair welding was performed various locations on the FL3 horizontal stiffeners cross beam side of segment. Welder is identified as Mr. Wang Jun (067752). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair-1 and CWR1414 procedure.

Shield Metal Arc Welding (SMAW) VT repair welding was performed various locations on the FL3 horizontal stiffeners cross beam side of segment. Welder is identified as Mr. Li Yongshui (067652). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair-1 and CWR1414 procedure.

8AW+8BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 004, 005, 008, 009, 032 and 034 located at OBW8D counter weight side of segment. Welder is identified as Mr. Xu Changxue (066002). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2112-FCM-1.

9BE+9CE

Flux Core Arc Welding (FCAW) welding was performed on weld joint 047 and 048 located at BP071-001 bottom plate of segment. Welder is identified as Mr. Zhang Hanming (220066). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2132.

9AE

Shield Metal Arc Welding (SMAW) repair welding (buttering ends) was performed on deck plate I Rib members RS72C and RS65A cross beam side of segment. Welder is identified as Mr. Jiang Zhen (068917). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-485-SMAW-3G (3F)-Repair-1 and WR13672 procedure.

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Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions at Tail Assembly Yard. Locations and description of work are as followed:

8 East and 8 West

1. Sea fasteners and cable trays are being installed at various locations inside segment.

7 West

1. Grit blasting at various locations (internal/ external) on segment.

9BE+9CE

1. ZPMC performed root opening verification on the deck plate weld splice. This QA noted that approximately 95% of weld joint root is between 14mm to 22mm which exceeded the WPS (WPS-B-T-223(2)1T-2) being used at this area. ZPMC QC personnel stated that he will issue a WR procedure to close gap (buttering edge) to comply with approved WPS (12mm max root opening).

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

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Inspected By:	Alaniz,Joe	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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